Solve the following equations. Show work on both sides of the equation.

EXAMPLES

1.
$$-3x + 15 = -9$$

2.
$$6x - 8 = -2x + 48$$

3.
$$5(x+8) = -3(x+16)$$

4.
$$-10 = 6 + 2(x-1)$$

EXERCISES

5.
$$-2x + 18 = 48$$

6.
$$4(x-3)=60$$

7.
$$11x - 6 = 8x + 15$$

8.
$$x + 25 = -4x + 75$$

9.
$$6(x+4)=2(x+16)$$

10.
$$4(x+3) = -2(x-9)$$

11.
$$5(x-6)=2x-24$$

12.
$$27 = 9 + 3(x + 2)$$

13.
$$4+5(x-3)=29$$

14.
$$-7 = -1 + 6 (x + 2)$$

15.
$$2+6(x+1)=22+2(x-3)$$

16.
$$8+5(x+2)=3x+26$$

The data in the following table shows the attendance at the performances of a play.

Performance Number	Attendance
2	100
6	260

- 17. Find the slope of the line that connects the two data points.
- 18. Write an equation in point-slope form for the line.
- 19. At what performance number can we expect the attendance to equal 380 (A full house!)?